## Sonoma County Water Agency Video Captions

I'm Rebecca Simonson, I'm a Water Agency Engineer here at the Sonoma County Water Agency. I work in the Energy Resources Group which is a group that focuses on renewable energy and energy efficiency within the water agency. So the main project I work on is a project called Carbon Free Water by 2015. Back in 2005 and 2006, the Water Agency recognized that it was the largest electricity user in Sonoma County so at that time, the Water Agency recognized that we need to do something about that, we need to show leadership in terms of climate action, so we made a commitment to Carbon Free Water in our electricity use for both water transmission and water treatment by 2015. It's basically threefold: we have implemented and supported various water efficiency programs throughout the county and reduced our water consumption by 28 percent since 2005. The second item for Carbon Free Water is system efficiency itself – efficiency of our pumps; the efficiency of our processes; the efficiencies of our buildings. Since 2005, we've improved our system efficiency by 18%. And the third and probably most interesting facet of Carbon Free Water is our actual energy sources. In our power supply, about 94 percent is carbon free sources. We've enter into a contract to purchase a large amount of energy from the landfill-gas-to-energy project at the Mecham Road landfill in Petaluma. So what that does is there's wells injected into the landfill that collect the methane gas and the methane gas then powers generators to create renewable energy. We also operate our own dam – Warms Springs Dam – It's Lake Sonoma that generates renewable electricity through hydropower. The agency owns and operates three solar arrays throughout the county. Together, all three account for about six percent of our energy needs agency wide. The wind turbine project is in Geyserville. That project generates about 10 percent of just that wastewater treatment plant's energy. Now that we're down to 97 percent reduction, we need to get to the 100 percent. Doing that, we need to be more creative about our solutions. We need to look at where we're purchasing our energy from for our small meters; how we can aggregate those together, and generate or build new renewable projects. We're looking at further solar projects; we're looking at further efficiency projects; we're always constantly looking for opportunities.

I've been with the agency for two years working on this project and it is extremely exciting. It has been incredibly, incredibly rewarding to see the progress and see that this water agency is actually achieving that goal. We're actually getting there. 97 percent reduction is, you know—if you round up that's 100 percent! So it's a huge accomplishment and I'm very proud to be able to help with it and to be part of the agency.